

CLAIMS

What is claimed is:

1. A method for authenticating at least one of a
media and data stored on said media, in order to
5 prevent at least one of piracy, unauthorized access and
unauthorized copying of the data stored on said media,
wherein said media is modulated via at least one
modified modulation rule to generate at least one
authentication key or component thereof for
10 authenticating at least one of said media and said
data, said method comprising the steps of:

(a) reading the data from said media;

(b) detecting the modulation of the at least one
modified modulation rule associated with the data;

15 (c) deriving an embedded authentication key or
component thereof responsive to said detecting step
(b);

(d) comparing the embedded authentication key or
component thereof, to at least one authentication key
20 or component thereof;

(e) authenticating the at least one of said media and said data responsive to said comparing step (d); and

(f) outputting said data as at least one of
5 audio, video, audio data, video data and digital data substantially free of the modulation of the at least one modified modulation rule.

2. A method according to claim 1, wherein said
deriving step (c) derives the embedded authentication
10 key or component thereof as a combination of on-off binary codes representing ones and zeros to represent a predetermined symbol sequence.

3. A method according to claim 1, wherein said
outputting step (f) further includes the step of
15 converting said data into a stereo analog signal without transferring, in the data, the modulation of the at least one modulation rule used to derive the embedded authentication key or component thereof.

4. A method according to claim 1, and further
20 including the step of:

(g) locating at least one modified modulation rule on at least one of a per track basis and interval basis throughout said media such that said authentication step (e) is performed for at least one of each track to be played, throughout playback and throughout recording.

5. A method according to claim 1, wherein said authenticating step (e) further includes a step of authenticating using a different authentication key or component thereof for each disc track.

6. A method according to claim 1, said method comprises the step of authenticating the at least one of the data and the media via at least two different authentication keys, each of which successively must be authenticated before said data is finally output via said outputting step (f).

7. A method according to claim 1, wherein said method authenticates the at least one of the media and the data over a plurality of interconnected computer

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networks comprising at least one of a local network, global network and the Internet.

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8. A method according to claim 1, wherein said authenticating step (e) further includes a step of using at least three different sources for compiling compound authentication keys.

5 9. A method according to claim 1 wherein said deriving step (c) further comprises the step of at least one of decoding and decrypting the embedded authentication key or component thereof for subsequent authentication.

10 10. A method according to claim 1 wherein said comparing step (d) further comprises the step of comparing the at least one modified modulation rule comprising the at least one authentication key or component thereof, to at least one lookup table of
15 valid modified modulation rule output values comprising the at least one authentication key or component thereof.

20 11. In a method for authenticating at least one of a media and data stored on said media, in order to prevent at least one of piracy, unauthorized access and

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unauthorized copying of the data stored on said media,
a data disc comprising media containing at least one
modified modulation rule comprising at least one
authentication key or component thereof for
5 authenticating at least one of said media and said
data.

12. In a method for authenticating at least one of a
media and data stored on said media, in order to
prevent at least one of piracy, unauthorized access and
10 unauthorized copying of the data stored on said media,
wherein said media is modulated via at least one
modified modulation rule to generate at least one
authentication key or component thereof for
authenticating at least one of said media and said
15 data, a data player comprising a data processor
performing the steps of:

(a) reading the data from said media;

(b) detecting the modulation of the at least one
modified modulation rule associated with the data;

20 (c) deriving an embedded authentication key or
component thereof responsive to said detecting step

(b);

(d) comparing the embedded authentication key or component thereof, to at least one authentication key or component thereof;

(e) authenticating at least one of said media and said data responsive to said comparing step (d); and

(f) outputting said data as at least one of audio, video, audio data, video data and digital data substantially free of the modulation of the at least one modified modulation rule.

13. In a method for authenticating at least one of a media and data to be stored on said media, in order to prevent at least one of piracy, unauthorized access and unauthorized copying of the data stored on said media, a data message comprising modulation via at least one modified modulation rule to generate at least one authentication key or component thereof for authenticating said data message, and wherein the modified modulation rule cannot be readily altered, obscured nor removed from said data message without simultaneously degrading or impairing a quality of an audible component of said data message, and wherein the data message is transmitted substantially free of the

modified modulation rule thereby preventing a destination processor from reading and subsequently authenticating said data message.

14. A system for authenticating at least one of a media and data stored on said media, in order to prevent at least one of piracy, unauthorized access and unauthorized copying of the data stored on said media, wherein said media is modulated via at least one modified modulation rule to generate at least one authentication key or component thereof for authenticating at least one of said media and said data, said system including a data player containing a data processor comprising lookup table means for intentionally breaking standard modulation rules by which bit patterns are recorded as one or more symbol sequences on a data media, said lookup table means connected to a focus server, tracking server, laser, lens and mirror, together comprising a portion of a disc reader housed in a data player device.

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